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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/697,961	10/27/2000	Derek Sellin	781.381USW1	5058

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EXAMINER

SHAH, CHIRAG G

ART UNIT	PAPER NUMBER
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2664

DATE MAILED: 01/30/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/697,961

Applicant(s)

SELLIN ET AL.

Examiner

Chirag G Shah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: reference index '3114' on page 6 of the specification does not exist. Appropriate correction is required.

Claim Objections

2. Claims 1-13 objected to because of the following informalities: The word "characterized by" in each claim is unacceptable. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3 and 5-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Suonvieri (WO 95/01015) in view of Hoffpauir (Reg. Number: H1, 918).

Referring to claim 1, Suonvieri discloses in figure 6 of a method of connecting network elements to a radio system comprising one or more network elements (601 and 602), a base station controller (600) and in which system information between the network elements is transmitted in frames that are divided into time slots as disclosed in figures 4, 5 and 7 and claim 1, and in which system the base station controller (600) controls one or more network elements,

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and network element identification information has been fed into a network element to be installed, and in which method the network element is physically connected to the system by means of the telecommunication connections, wherein the frames used by the base station controller (600) for communication with the network elements, unused consecutive time slots (305 and 402) of the frames being divided into one group (303 or 304), and each group having one time slot (as disclosed in figure 5) used as a communication channel as regards time slot allocation from the group, and the base station controller (600) allocating necessary telecommunication capacity (as disclosed in figure 5) for the use of communication between the network element and the base station controller, and the allocated telecommunication capacity being branched by software (a network configuration entity as shown in figure 6) through the telecommunication connections to the network element. Suonvieri discloses in figure 6 of a network configuration entity 604 that controls transmission of configurations data to the base stations, but fails to explicitly include a network management system (300) that are operatively interconnected by means of telecommunication connections comprising traffic channels and control channels. Hoffpauir discloses in figure 1 of the integration of a traditional wireless system including BSC 50 that is operatively integrated to a network management system by means of telecommunication connections. Therefore, it would have been obvious to one of ordinary skill in the art to modify the teachings of Suonvieri to include an NMS in order to perform operations and maintenance as well as managing and monitoring the operations of the BSC and the one or more BTS.

Referring to claims 2 and 11, Suonvieri discloses a radio system comprising one or more network elements (601,602), a base station controller (600) and in which system information

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between the network elements (601,602) is transmitted in frames that are divided into time slots as disclosed in figures 4, 5 and 7 and claim, and in which system the base station controller (600) controls one or more network elements that comprise network element identification information (based on information in 604), whereby in frames arranged to be used by the base station controller (600) for communication with the network elements (601,602), unused consecutive time slots (305 and 402) of the frames being divided into one or more groups (303,304), and each group having one time slot (as disclosed in figure 5) used as a communication channel as regards time slot allocation from said group, and predetermining identification information for the base station controller about network elements allowed to be connected to the base station controller (as disclosed on page 9, lines 5-31), and after being physically installed, the network element to be installed being arranged to search the frames received by means of the telecommunication connections for the communication channels of the groups and to identify free groups by means of the communication channels found (as disclosed in figures 3-6, specifically in figure 5), and the network element (601,602) being arranged to transmit over the communication channel of the group its identification information and hardware information to the base station controller (via the Abis network and manages to establish a connection since it uses a predetermined channel as disclosed on page 10, lines 1-25) being arranged to compare the identification information with the identification information about the allowed network elements, and when the identification information is allowed, to accept the network element as in figure 6, and the base station controller being arranged to allocate from the group necessary time slots for the use of communication between the network element and the base station controller and to inform the network element of the allocated time slots (as disclosed in figure 5 and 6), and

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the allocated time slots being branched by software through the telecommunication connections to the network elements (as disclosed in figure 6 via network configuration entity 604).

Suonvieri discloses in figure 6 of a network configuration entity 604 that controls transmission of configurations data to the base stations, but fails to explicitly include a network management system (300) that are operatively interconnected by means of telecommunication connections comprising traffic channels and control channels. Hoffpauir discloses in figure 1 of the integration of a traditional wireless system including BSC 50 that is operatively integrated to a network management system by means of telecommunication connections. Therefore, it would have been obvious to one of ordinary skill in the art to modify the teachings of Suonvieri to include an NMS in order to perform operations and maintenance as well as managing and monitoring the operations of the BSC and the one or more BTS.

Referring to claim 3 and 12, Suonvieri discloses in figure 6 of network elements 601 and 602 of the radio system being interconnected coupled in series and also discloses that the configuration data is placed in series of timeslots marked with an identifier, thus implying that that the base station controller (600) would reject the network element if its identification information does not exist among the identification information on the allowed network elements as claims.

Referring to claim 5, Suonvieri discloses in figure 6 wherein some network elements (601 and 602) of the radio system being interconnected coupled in series by means of the telecommunication connections as claim.

Referring to claim 6, Suonvieri discloses a method as claimed in claim 5, wherein the unused-time-slot groups as disclosed in figures 3 and 4 being transmitted by software (network

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configuration entity 604 as disclosed in figure 6) as whole groups in the frames to network elements (601 and 602) that are connected to the base station controllers (600) by telecommunication connections capable of the transmission as claim.

Referring to claim 7, Suonvieri discloses on page 5 lines 7 to page 6, lines 7 and in figure 3 and 4 and respective portion of the specification, wherein even when faults and malfunctions occurs, the structure of the base station is easy to control such that the structure of the base station can be displayed on the BSC and the configuration of the network can be easily changed from one point in the network. Thus implying that information on the unused-time-slot groups may be manually set into network elements that are connected to the base station controllers by telecommunication connections incapable of transmission by software (when malfunction occurs) as claim.

Referring to claim 8, Suonvieri discloses in figures 3-6 and respective portion of the specification, wherein the network element to be installed, after searching the frames received by means of the telecommunication connections for the communication control channels of the groups, searching the telecommunication connections for routes to the network elements which comprise unused-time-slot groups (as disclosed in figure 5) whole groups in the frames as claims.

Referring to claim 9, Suonvieri discloses in figure 6 a method as claimed in claim 1, wherein the network elements (601 and 602) being the base stations of the system.

Referring to claim 10, Suonvieri discloses in figure 9 and on page 12, lines 16-35 of a method as claimed in claim 1, wherein the communication control channel of each group being a last time slot in the group as claim.

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5. Claim 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Suonvieri in view of Hoffpauir as applied to claims 1-3 and 5-13 above, and further in view of Poon et al. (U.S. Patent No. 5,940,380).

Referring to claim 4 and 14, Suonvieri in view of Hoffpauir fails to disclose a method, wherein the network element selecting another base station controller group communication channel when the base station controller rejects the network element, and the network element transmitting its identification information and hardware information over the communication channel to another base station controller, and the network element repeating this procedure until a base station controller accepts the network element. Poon et al discloses in figure 1 and respective portions of the specification that when the mobile station MS1 moves during the call into another cell C4, BST1 (which is controlled by BSC1) rejects, the network element and the MS1 must get a new dedicated communication channel, which must be allocated in the new cell (which includes BST4 being controlled by BSC2). Therefore, it would have been obvious to one of ordinary skill in the art to modify the teachings of Suonvieri in view of Hoffpauir to include the teaching of Poon et al in order to efficiently maintain the established call.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

(703) 305-3988, (for formal communications intended for entry)

Or:

(703) 305-3988 (for informal or draft communications, please label "Proposed" or "DRAFT")

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Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag G Shah whose telephone number is 703-305-5639. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

cgs
January 15, 2004


Ajit Patel
Primary Examiner